

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicants : Juengel, et al.
App. No : 10/516,992
Filed : November 30, 2004
For : NEW GDF-9 AND GDF-9B (BMP-15)
SEQUENCES FOR ALTERING
MAMMALIAN OVARIAN
FUNCTION AND OVULATION RATE
Examiner : Unknown
Art Unit : 1632

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application is a PTO/SB/08 Equivalent listing thirty-three (33) references to be considered by the Examiner.

This Supplemental Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required. If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 30 Sept. 2005

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		Filing Date	November 30, 2004
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		Art Unit	1632
(Multiple sheets used when necessary)		Examiner	Unknown
SHEET 1 OF 3		Attorney Docket No.	AJPARK27.001APC

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name of Patentee or Applicant	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹
		WO 99/17797	04/15/99	PCT		
		WO 00/66620	11/09/00	PCT		
		WO 01/85926 A2	11/15/01	PCT		
		WO 01/96393 A2	12/20/01	PCT		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
		Juengel, J.L., et al., "Growth Differentiation Factor 9 and Bone Morphogenetic Protein 15 Are Essential for Ovarian Follicular Development in Sheep," <i>Biology of Reproduction</i> 67: 1777-1789. (2002)	
		Vitt, U.A., et al., "In Vivo Treatment with GDF-9 Stimulates Primordial and Primary Follicle Progression and Theca Cell Marker CYP17 in Ovaries of Immature Rats," <i>Endocrinology</i> , Volume 141, No. 10, pp. 3814-3820. (2000)	
		Yan, C., et al., "Synergistic Roles of Bone Morphogenetic Protein 15 and Growth Differentiation Factor 9 in Ovarian Function," <i>Molecular Endocrinology</i> , 15: 854-866. (2001)	
		Montgomery, G.W., et al., "Genes Controlling Ovulation Rate in Sheep," <i>Reproduction</i> , 121: 843-852. (2001)	
		Aaltonen, J., et al., "Human Growth Differentiation Factor 9 (GDF-9) and Its Novel Homolog GDF-9B Are Expressed in Oocytes during Early Folliculogenesis," <i>The Journal of Clinical Endocrinology & Metabolism</i> , Volume 84, No. 8, pp. 2744-2750. (1999)	
		Bodensteiner, K.J., et al., "Molecular Cloning of the Ovine Growth/Differentiation Factor-9 Gene and Expression of Growth/Differentiation Factor-9 in Ovine and Bovine Ovaries," <i>Biology of Reproduction</i> , 60: 381-386. (1999)	
		Bodensteiner, K.J., et al., "Expression of Growth and Differentiation Factor-9 in the Ovaries of Fetal Sheep Homozygous or Heterozygous for the Inverdale Prolificacy Gene (FecX) ¹ ," <i>Biology of Reproduction</i> , 62: 1479-1485. (2000)	
		Daopin, S., et al., "Crystal Structure of Transforming Growth Factor- β 2: An Unusual Fold for the Superfamily," <i>Science</i> , Volume 257: 369-373, dated July 17, 1992.	
		Davis, G.H., "Ovulation Rate and Litter Size of Prolific Inverdale (FecX) and Hanna (FecXH) Sheep," <i>Proceedings of Association for the Advancement of Animal Breeding and Genetics</i> , Volume 14, pp. 175-178. (2001)	
		Dong, J., et al., "Growth Differentiation Factor-9 is Required During Early Ovarian Folliculogenesis," <i>Nature</i> , Volume 383, dated October 10, 1996.	
		Dube, J.L., "The Bone Morphogenetic Protein 15 Gene is X-Linked and Expressed in Oocytes," <i>Molecular Endocrinology</i> , Volume 12: 1809-1817. (1998)	
		Eckery, D.C., et al., "Expression of mRNA Encoding Growth Differentiation Factor 9 and Bone Morphogenetic Protein 15 During Follicular Formation and Growth in a Marsupial, the Brushtail Possum (<i>Trichosurus Vulpecula</i>)," <i>Molecular and Cellular Endocrinology</i> , Volume 192, pp. 115-126. (2002)	

Examiner Signature	Date Considered
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*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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NON PATENT LITERATURE DOCUMENTS

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		Galloway, S.M., et al., "Mutations in an Oocyte-Derived Growth Factor Gene (BMP15) Cause Increased Ovulation Rate and Infertility in a Dosage-Sensitive Manner," <i>Nature Genetics</i> , Volume 25, No., 7, pp. 279-283, dated July 2000.	
		Griffith, D.L., "Three-Dimensional Structure of Recombinant Human Osteogenic Protein 1: Structural Paradigm for the Transforming Growth Factor β Superfamily," <i>Proceedings of the National Academy of Science</i> , Volume 93, pp. 878-883, dated January 1996.	
		Hart, P.J., et al., "Crystal Structure of the Human T β R2 Ectodomain-TGF- β 3 Complex," <i>Nature Structure Biology</i> , Volume 9, No., 3, pp. 203-208, dated March 2002.	
		Hanrahan, J.P., "Evidence for Single Gene Effects on Ovulation Rate in The Cambridge and Belclare Breeds," <i>Second International Workshop on Major Genes for Reproduction in Sheep</i> , Chapter 6, Toulouse (France), INRA Ed., Paris, pp. 93-102. (1991)	
		Hinck, A.P., et al., "Transforming Growth Factor β 1: Three-Dimensional Structure in Solution and Comparison with the X-ray Structure of Transforming Growth Factor β 2 α , β ," <i>American Chemical Society, Biochemistry</i> , Volume 35, pp. 8517-8534. (1996)	
		Jaatinen, R., et al., "Localization of Growth Differentiation Factor-9 (GDF-9) mRNA and Protein in Rat Ovaries and cDNA cloning of Rat GDF-9 and its Novel Homolog GDF-9B," <i>Molecular and Cellular Endocrinology</i> , Volume 156, pp. 189-193. (1999)	
		Kirsch, T., et al., "Crystal Structure of the BMP-2-BRIA Ectodomain Complex," <i>Nature Structural Biology</i> , Volume 7, No., 6, pp. 492-496, dated June 2000.	
		Laitinen, M., et al., "A Novel Growth Differentiation Factor-9 (GDF-9) Related Factor is Co-Expressed with GDF-9 in Mouse Oocytes During Folliculogenesis," <i>Mechanisms of Development</i> , Volume 78, pp. 135-140. (1998)	
		McPherron, A.C., and Lee, S.J., "GDF-3 and GDF-9: Two New Members of the Transforming Growth Factor- β Superfamily Containing a Novel Pattern of Cysteines," <i>The American Society for Biochemistry and Molecular Biology, Inc., The Journal of Biological Chemistry</i> , Volume 268, No. 5, Issue of February 15, pp. 3444-3449. (1993).	
		Mittl, P.R.E., et al., "The Crystal Structure of TGF- β 3 and Comparison to TGF β 2: Implications for Receptor Binding," <i>Protein Science</i> , Volume 5: 1261-1271, Cambridge University Press. (1996)	
		Scheufler, C., et al., "Crystal Structure of Human Bone Morphogenetic Protein-2 at 2.7 Resolution," <i>J. Mol. Biol.</i> , Volume 287, Article No., jmbi.1999.2590, pp. 103-115. (1999)	
		Cohen, S.N., et al., "Nonchromosomal Antibiotic Resistance in Bacteria: Genetic Transformation of <i>Escherichia Coli</i> by R-Factor DNA," <i>Proceedings of the National Academy of Science</i> , Volume 69, No. 8, pp. 2110-2114, dated August 1972.	
		Wells, D.N., "Cloning Sheep from Cultured Embryonic Cells," <i>CSIRO Publishing, Reproduction, Fertility and Development</i> , Volume 10, pp. 615-626. (1998).	
		Clark, A.J., "Generation of Transgenic Livestock by Pronuclear Injection," <i>Methods in Molecular Biology</i> , Volume 180: <i>Transgenesis Techniques</i> , 2 nd Edition, Principles and Protocols, pp. 273-287. (2002)	
		Chen, S.H., et al., "Efficient Production of Transgenic Cloned Calves Using Preimplantation Screening," <i>Biology of Reproduction</i> , Volume 67, pp. 1488-1492. (2002)	
		Arat, S., et al., "Production of Transgenic Bovine Embryos by Transfer of Transfected Granulosa Cells Into Enucleated Oocytes," <i>Molecular Reproduction and Development</i> , Volume 60: 20-26. (2001)	

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		Freidinger, R.M., et al., "Protected Lactam-Bridged Dipeptides for Use as Conformational Constraints in Peptides," American Chemical Society, J. Org. Chem., Volume 47, pp. 104-109. (1982)	

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